Governm
Publicati

CAI
HR2
– 1994
H15

Jobs Excluded from the Unemployment Insurance System in Canada: An Empirical Investigation

Zhengxi Lin

Purpose

This study is a component of a major evaluation of the UI regular benefits program in Canada. Its main objective is to provide the general public and policy-makers with an empirical picture of the growing number of jobs that have not been covered by the social safety net of the UI system. The data for the analysis come from the annual job files of the Labour Market Activity Survey (LMAS). This is the only useful data set for tabulating jobs excluded from the UI system. As new data become available, a similar analysis will be carried out to update our picture of this important topic.

Background

In HRDC's discussion paper entitled "Improving Social Security in Canada", there is a proposal to broaden the unemployment insurance system to cover part-time and self-employed workers as a way to keep pace with the changing employment structure in Canada.

While jobs excluded from the UI system and traditionally defined non-standard employment are highly correlated, they are not necessarily equivalent in reality. Each includes a measure of self-employment and of part-time paid workers but a problem exists in interpretation of what constitutes part-time work. Statistics Canada, which tabulates the generally

perceived definition of non-standard employment, classifies an individual as a part-time worker, if his/her weekly hours of paid employment are less than 30 hours. This definition may be useful for collecting data for academic research, but it is not useful for gathering relevant statistics on jobs excluded from the UI system. The existing UI provisions exclude workers whose weekly hours of paid employment are less than or equal to 15 hours. Part-time workers with more than 15 hours per week are legitimately covered by the UI rules. Thus, neither the literature on non-standard employment nor Statistics Canada's part-time employment statistics can provide an accurate picture of the level and growth of jobs excluded from UI coverage in recent years. The objective of this study is to fill the information gap.

Methodology

This study uses descriptive statistics and the logistic regression model to detect the level and growth of jobs excluded from the UI system. As mentioned above, the empirical work is based entirely on the available micro data from the LMAS. The LMAS data contain rich information on individuals' socio- economic factors and personal attributes, but they also have limitations. The LMAS presently cannot be linked to other existing micro data files. This greatly limits the investigator's ability to unravel the underlying forces responsible for

the employment development in recent years. Given this data constraint, this study attempts to pin-point the characteristics that are prevalent among UI-excluded jobs and the probability for an individual to be in such a job.

Under the existing UI provisions, full-time students are ineligible for UI coverage. Therefore, the following highlights should be interpreted accordingly: the relevant statistics and discussions do not apply to full-time students.

Key findings

The total number of jobs in Canada grew from 14.1 million in 1986 to 14.8 million in 1990, which amounted to a growth of 5 percent over a five year period. This overall picture masks certain important details. Jobs covered by UI experienced a modest growth of 2.4 percent (from 11.4 million to 11.7 million), but jobs excluded from UI grew at a much faster pace of 16 percent (from 2.7 million to 3.1 million).

By 1990, UI provisions were responsible for excluding close to 1 million paid jobs with 15 or fewer hours worked per week, and nearly 2.2 million self-employed jobs from the coverage of UI's social safety net. Among them, self-employment experienced a rapid growth rate of 18 percent, while the growth for part-time paid jobs (15 hours or less per week) was 12 percent between 1986-1990.

Individuals with UI-excluded jobs were characterized by certain socio-economic factors and personal attributes. They were more likely to be prime-age labour force members with post-secondary or higher education, employed in service industries, non-unionized, uncovered by job-related pension plans, and relatively low paid. The average hourly wage of UI-excluded jobs was $11.92 in 1990, almost $1.50 less than its counterpart for UI-covered jobs.

The above is a snapshot impression that more or less applies to the whole period 1986-1990. Over the course of the five years, changes did take place. In particular, the gap in the degree of unionization between UI covered and uncovered jobs narrowed appreciably, from 17.9 percentage points in 1986 to 9.7 points in 1990. The discrepancy in job-related pension coverage also improved noticeably, with the gap closing from 33 percentage points in 1986 to 29 percentage points in 1990.

The contributions of various factors to an individual's likelihood of having a UI-excluded job can be inferred from the *unscrambling* of estimated coefficients of the logistic equations. The study examines various characteristics of an individual (e.g., his/her province of residence, age, educational achievement, etc.) and ranks the possible outcomes for each characteristic according to their impacts on the probability of the individual having a UI-excluded job. For example, with respect to the individual's province of residence, living in Saskatchewan would greatly increase a person's chance of having a UI-excluded job, while living in Newfoundland would have hardly any contribution to the possibility. Similarly, in terms of educational achievement, a university education would heavily increase the risk of having a UI- excluded job, but an elementary education would have little effect. The study's ranking of characteristics of each variable, according to their impacts (from most to least) on an individual's chance of being employed in a UI-excluded job, can be summarized as follows:

Province of residence – Saskatchewan, Manitoba, Alberta, British Columbia, Nova Scotia, Ontario, Quebec, Prince Edward Island, New Brunswick, and Newfoundland.

Age – 55-69, 45-54, 35-44, 25-34, and 16-24.

Educational achievement – university, post-secondary other than university, high school, and elementary school.

Gender – female, and male.

Marital Status – married, single, and unspecified.

Industry: primary, services, construction, sales, transportation, finance and real estate, health, education, communication, manufacturing, government, and utilities.

By pulling all of the contributing factors together, the study presents the combinations that would render a person's job most likely and least likely to be excluded from the social safety net of the UI system. The two extreme cases are : (1) at the low end of the spectrum – an individual who worked in the utilities sector, lived in Newfoundland, was an unmarried male of 16-24 years of age, and had elementary education; (2) at the high end of the spectrum – the person worked in a primary industry, lived in Saskatchewan, was a married female of 55-69 years of age, and completed at least some university education. The results show:

Individuals at the low end of the spectrum had a probability of 0.7 percent of having a job not covered by UI's safety net in 1986. However, people at the high end of the spectrum were almost certain to be in a UI excluded job. Their probability of having such a job was 80.9 percent in the same year.

Although the estimated probabilities varied over time, the patterns remained relatively stable. In 1990, the probabilities for the two extreme scenarios were 1.0 and 72.5 percent respectively. The gap narrowed somewhat over the 5-year span, but the difference was not sufficient to alter the general conclusion.

Biographical notes

Zhengxi Lin is currently an Evaluation Officer with Insurance Programs Directorate, Evaluation Branch, Human Resources Development Canada. He received his Ph.D degree in 1993 from Dalhousie University and has co-authored a number of publications in professional journals.

Canada